

FCS05 – SOP for Inventory of the Controlled Dangerous Substances Lab

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1. Scope

- 1.1. This document establishes the procedures for tracking laboratory inventory, such as chemical reagents, reference standards, evidence, case files, equipment, and consumable items, as well as storage of the aforementioned items.

2. Background

- 2.1. To establish a procedure for laboratory inventory in order to track and maintain a functional and secure laboratory.

3. Safety

- 3.1. Read Safety Data Sheets (SDS) to determine the safety hazards for chemicals and reagents used in the standard operating procedures.
- 3.2. Wear personal protective equipment (e.g., lab coat, gloves, mask, eye protection), when carrying out standard operating procedures (SOPs).

4. Materials Required

- 4.1. Not applicable

5. Standards and Controls

5.1. Not applicable

6. Calibration

6.1. Not applicable

7. Procedures

7.1. General Inventory Procedures

7.1.1. Inventory logs will be kept in either handwritten or digital format.

7.1.1.1. Written logs will be maintained in the laboratory and will not be removed.

7.1.1.2. Digital logs shall have access restricted to Forensic Chemistry Unit (FCU) employees and relevant personnel.

7.1.2. Inventory logs shall be maintained and updated continuously as inventory is added or removed.

7.1.2.1. Logbooks should be updated as soon as possible after adding or removing inventory covered by a logbook. Note: Chemical inventory is updated at minimum once every three months during the quarterly audit.

7.1.3. A quarterly inventory audit for Chemicals, Evidence, and Drug Standards shall be performed in order to ensure that inventory logs are up to date and accurate.

7.1.3.1. The audit will be performed by the FCU Manager, or designee.

7.2. Chemical Inventory Procedures

7.2.1. Chemicals shall be stored in chemical cabinets designated for flammables, acids, or bases based on whether they are acids, bases, or neither.

7.2.2. Inventory and locations of chemicals shall be tracked digitally in the FCU shared folder.

7.2.2.1. Each chemical cabinet shall be labeled and, where practical, barcoded.

7.2.3. Chemicals shall not be removed from the lab without documentation on the chemical logbook. If a chemical is used partially and returned to its cabinet immediately, it does not need to be recorded.

7.2.4. When a chemical is emptied or discarded, the logbook will be updated to reflect the total quantity remaining.

7.2.5. Chemicals shall be isolated and clearly marked when they are expired in order to prevent use of expired reagents in accredited work, or until they

can be re-assessed and a new expiration date set.

7.2.5.1. Expiration date of chemicals is set as 10 years from the date of receipt of that chemical or the manufacturer's expiration date, whichever comes first. If necessary, a manufacturer's set date may be extended if analytical testing is conducted and indicates the chemical is performing as expected.

7.3. Drug Standards Inventory Procedures

7.3.1. Reference standards and secondary/retained standards are stored according to *FCS03 - SOP for Ordering, Receiving, and Storage of Controlled Dangerous Substances*.

7.3.2. Stock drug standards shall not be removed from the laboratory except for disposal purposes. Working drug standards may be transported to other in-house laboratories containing additional equipment for chemical analyses.

7.3.3. An electronic logbook shall be kept for both reference standards and secondary/retained standards (if applicable).

7.3.3.1. All transactions of receipt, usage, disposal, or other removal to or from the drug vault shall be recorded in the logbook at the time of the transaction. Information recorded shall include the date, substance identifier(s), amount added or removed, the individual performing the transaction, and witness.

7.3.3.2. A computer and balance will be kept inside of the drug vault for immediate recording of transactions.

7.3.3.3. In situations where the electronic logbook cannot be immediately updated, a physical temporary log (FCU Temporary Drug Standard Log, Document Control Number 30399) will be available in the vault for recording transactions. The temporary list will be transferred to the logbook as soon as possible and recorded.

7.3.4. All Controlled Dangerous Substances shall be kept in secured cabinets or freezers when not in use, in accordance with chemical storage criteria as described by the manufacturer (where applicable).

7.4. Casework/Sample Inventory

7.4.1. Cases in the Forensic Chemistry Laboratory that are not currently assigned to a chemist for analysis shall be stored in the secure Evidence Vault.

7.4.2. When a case is assigned to a chemist or returned to the Evidence Vault, it shall be documented in a Laboratory Information Management System (LIMS), electronic equivalent, or on a paper chain of custody, as appropriate.

7.4.3. Evidence Retention Policy

7.4.3.1. Samples shall be returned to the agency which requested the analysis after the analysis has been completed.

7.4.3.2. Analyzed samples shall be stored in the Evidence Vault until returned to the requesting agency according to *FCS11 – Procedure for Evidence Handling*.

7.5. Case File Inventory

7.5.1. Unless authorized by the FCU Manager, physical worksheets and data files shall be kept in the Consolidated Forensics Laboratory and must not be removed from the building.

7.5.1.1. Copies of the case file shall be provided upon a discovery request.
Note: All FCU Report Packets are stored digitally.

7.6. Equipment Inventory Procedures

7.6.1. A logbook of all FCU equipment which can influence laboratory activities shall be maintained.

7.6.2. The inventory logbook will consist of critical equipment identifiers (i.e., manufacturer, model, serial numbers, type), software (if applicable), and location as well as service and/or calibration dates.

7.7. Consumable Item Inventory Procedures

7.7.1. A record of consumable item purchases will be maintained, but there will be no inventory log required to track consumable items.

8. Sampling

8.1. Not applicable

9. Calculations

9.1. Not applicable

10. Uncertainty of Measurement

10.1. Not applicable

11. Limitations

11.1. See specific SDS for information on how to properly store and handle chemicals.

11.2. This SOP does not cover safe use of equipment, just storage and inventory.

12. Documentation

- 12.1. Maintenance Logbooks
- 12.2. Equipment Inventory logbook
- 12.3. Chemical Inventory spreadsheets/logbook
- 12.4. CDS Standards Logbook
- 12.5. FCU Temporary Drug Standard Log (Document Control Number 30399)

13. References

- 13.1. Forensic Science Laboratory Quality Assurance Manual, (Document Control Number 10164).
- 13.2. DOM05 – Procedures for Instrument Checks and Maintenance (Document Control Number 1273)
- 13.3. DOM10 – Procedures for Handling Evidence and Clinical Specimens (Document Control Number 1281)